

**REMARKS**

The present application includes claims 1-24. By this response, claims 1 and 12 have been amended. Claims 23-24 have been cancelled.

Claims 1-24 were subject to a restriction requirement under 35 U.S.C. 121.

Claims 1-22 were rejected under 35 U.S.C. 102(b) as being anticipated by Mazess et al., U.S. Pat. No. 6,438,201 (“Mazess”).

The Applicant first turns to the restriction requirement under 35 U.S.C. 121 of claims 1-24 to one of the following groups of claims: Group I: 1-22 and Group II: 23-24. The Applicant provisionally elected claims 1-22 during a telephone conversation with the Examiner. The Examiner stated on page 2 of the Office Action mailed March 22, 2007 that the Applicant must affirm this election in this Response. The Applicant hereby affirms the provisional election and has cancelled un-elected claims 23-24. The Applicant does not waive the scope of the canceled claims from the currently pending claims. In addition, the Applicant does not waive the right to pursue the canceled claims in another application.

The Applicant now turns to the rejection of claims 1-22 under 35 U.S.C. 102(b) as being anticipated by Mazess. The Applicant respectfully submits that Mazess does not teach or suggest the entirety of the limitations recited in the pending claims for at least the reasons discussed below.

As stated beginning at col. 1, ln. 26, Mazess generally relates to “dual energy x-ray imaging and measuring equipment that distinguish between multiple basis materials. More

particularly, Mazess describes “a scanning bone densitometry system that adjusts x-ray flux by varying the current level of the x-ray source.”

As described beginning at col. 2, ln. 40, “[t]he dual energy scanning bone densitometry system of [Mazess] maintains a more closely optimized x-ray flux through an entire scan of the patient by adjusting x-ray current instead of or in addition to adjusting scan speed.” This is accomplished by controlling x-ray current according to a flux index based on the location or thickness of the body region being scanned. Because bone density measurements in certain regions of the body may be more critical than other regions, x-ray flux may be increased in these regions, as discussed beginning at col. 3, ln. 1. By adjusting the x-ray current settings for each scan line, continual flux adjustment may be provided to “maintain proper x-ray flux levels throughout an entire scan.”

Thus, Mazess teaches adjusting x-ray flux to improve scanning through a body region with different thickness.

Mazess does not teach detecting shape artifacts due to scintillator hysteresis. Rather, as discussed above, Mazess teaches flux adjustment during a scan.

Claims 1 and 12 have been amended to recite comparing a difference between a first and second signal level to a threshold “to detect a scintillator hysteresis shape artifact.” The preambles of these claims recited similar language which has now been added to the body of the claims for clarity. As discussed above, Mazess does not teach detection of scintillator hysteresis shape artifacts. Therefore, the Applicant respectfully submits that Claims 1 and 12 should be allowable over the cited art of record.

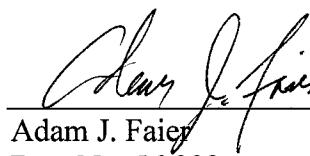
Claims 2-11 and 13-22 depend from independent claims 1 and 12, respectively. The Applicant respectfully submits that because claims 1 and 12 should be allowed for the reasons discussed above, claims 2-11 and 13-22 should also be allowed.

**CONCLUSION**

It is submitted that the present application is in condition for allowance and a Notice of Allowability is respectfully solicited. If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any additional fees or credit overpayment to the Deposit Account of GTC, Account No. 070845.

Respectfully submitted,

  
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Adam J. Faier  
Reg. No. 56,898

McAndrews, Held & Malloy, Ltd.  
34<sup>th</sup> Floor  
500 West Madison Street  
Chicago, Illinois 60661  
Phone (312) 775-8000  
Fax (312) 775-8100